

# 俳句

## Mathematics across the curriculum: Poetry and the haiku



John Gough  
Deakin University  
(retired)  
<jagough49@gmail.com>

“Today’s language lesson is about a special kind of poem: the haiku.”<sup>1</sup> And so the lesson begins—easy, familiar, predictable. No calculations, geometric diagrams or metric measurements. Not a mathematical thought in anyone’s head—which is hardly surprising.

But wait a minute: what about these mathematical demands and opportunities in a poetry lesson on haiku? Number of lines, counting syllables, defining syllables, Japan, seasons, grammatical cohesion, meaningful focus...

Counting a mere *three* lines is, literally, child’s play. Any student who can learn to write haiku will have automated counting lines “one, two, three” and syllable counting up to seven. Such counting *is* mathematical, but I will ignore it. However, there is more.

Syllables can be slippery. How many syllables in that last sentence? It depends how you say the words. For example, syll-a-bles can be slipp-er-y (that is eight); or do you say, “slip-ry”? (Counting syllables in English is not exactly the same as counting ‘sounds’ in Japanese. But the difference is subtle and technical—beyond the scope of this discussion.) Counting syllables in words and sentences is not mathematically challenging, but good linguistic practice for haiku writing.

Although brief, a haiku is like a meditation on or observation of an experience, conveyed directly through objective images or sensory feelings with no personal judgment or analysis. If you see something that makes you want to say to others, “Wow!” or, “Look at that,” or, “That’s striking or puzzling,” it may be a suitable topic for a haiku.

1. A haiku is a short Japanese form of poetry, of three lines, with five syllables in the first, seven in the second, and five in the last. Like sheep and fish, the plural of haiku is haiku.

A haiku is like a captivating photo of something in nature. A traditional haiku has at least two parts, often contrasting. It also mentions or suggests a season of the year. (Leaves colouring or falling, for example, suggest autumn; daffodils indicate spring.) It exemplifies the mystical paradoxes of Zen Buddhism but these spiritual ideas go beyond the scope of this discussion.

Haiku seem simple. But which of the following *is* a haiku?

- A. Midday cicadas  
Like a thousand alarm clocks  
Waking the babies.
- B. The afternoon traffic  
Is roaring like a waterfall’s  
Distant drumming.
- C. Midday cockatoos  
Screeching conversations  
Almost sound sensible.
- D. The orchard petals  
Scattering in gusty wind  
Bright as autumn leaves.

Also, to understand what is and what is not a haiku, it helps to distinguish haiku from not-quite-haiku, such as:

- **Senryū:** This is another Japanese poetry form with a haiku’s line-syllable structure but focussing on human oddities while haiku tend to be about nature: senryū are often cynical, or wryly humorous, while haiku are seriously thoughtful. Senryū do not include a *kireji* (a cutting word separating the two ideas of the haiku-type poem) or a *kigo*, or season-reference.

- **Tanka:** This is another Japanese Zen-meditative form consisting of five units (or separate lines), usually with the following pattern of syllables: 5–7–5–7–7.
- **Double-haiku:** This is a Western hybrid created by J. D. Salinger (author of *The Catcher in the Rye*), used by his fictional character Seymour Glass. A double-haiku has a line-syllable pattern of 5–7–5–5–7–5 and scope for more substantial statements.

It should be impossible to teach a lesson on haiku, at almost any age-level, without mentioning something about seasons, Japan, Zen Buddhism and famous Japanese haiku poets (for example, Matsuo Basho (1644–1694) and Kobayashi Issa (1763–1827)). Considering places, times, definitions and classifications demands mathematical apparatus such as a map, time-line, formal definitions, examples, counter examples and distinctions.

Many poets writing haiku in English relax the 5–7–5 line-syllable pattern, such as Ezra Pound's early haiku-homage *In a Station of the Metro*:

The apparition of these faces in the crowd  
Petals on a wet, black bough.

Notice that by adding a title, Pound expands on what can be said—the extra words help explain the poem. I recommend using the correct number of syllables. Being challenged by the formal rules for poetry focusses the creative mind. However, Basho sometimes placed haiku, like snapshots, in a prose narrative, as in his book *The Narrow Road to the Deep North*, describing his long journey to the north of Japan.

Finally, look back at the hidden (or implicit) haiku in our prose beginning.

In today's lesson  
we will be learning about  
a special poem.

Using just three lines,  
A haiku is Japanese  
Catching a moment.

Haikus are easy.  
There are no calculations.  
No metric measures.

No fractions in sight.  
No geometry or maps.  
No mathematics!

But wait a minute:  
We are counting syllables  
And numbers of lines.

The hint of season  
The Japanese origin  
Mathematical!

Simply shaping (or reshaping) our prose into the 5–7–5 syllable-counted pattern begins a kind of mathematical—and literary—thinking. Sometimes squeezing an entire story into a haiku is a problem (cue: problem solving). David Bader (2005) does this, amusingly, for *The Odyssey*:

Aegean forecast  
Storms, chance of one-eyed giants,  
Delays expected.

Bader omits most of Odysseus' ten-year journey, but you cannot fit everything in! Why not try the same with nursery rhymes or children's stories? For example:

*Noddy Goes to Toyland*  
Flee the woodcarver  
Here's Toyland – am I a toy?  
Yes! And brave! – I stay!

*Humpty Dumpty*  
Look how high I am!  
Whoops! Whoa, there. Can we help?  
Neigh!  
Let's have scrambled eggs!

I hope you are convinced and encouraged to look more widely for mathematics where you might have thought there was none—not because we should always *add* some mathematics, but because the mathematics has always been there and *must* be considered if we are to teach our chosen, seemingly non-mathematical, lesson. Sure: put on your Poetry Cap—but leave your Mathematics Cap on, too!

## References

- Bader, D. 2005. *Haiku U: From Aristotle to Zola, 100 great books in 17 syllables*. New York: Penguin.
- Matsuo, B. (1966). *The narrow road to the deep north and other travel sketches* (trans. Nobuyuki Yuasa). Harmondsworth: Penguin.

## Answers

(A) fits the haiku pattern; (B) misses the syllable counts and the reference to a season; (C) misses the syllable counts; (D) has two allusions to seasons. Can you revise (B), (C) and (D) so they become haikus?